

Virtual National Science Challenge – RULES & GUIDELINES

A PARTICIPATION FEE OF RM50.00 IS REQUIRED TO REGISTER FOR THIS COMPETITION. THE VIRTUAL NATIONAL SCIENCE CHALLENGE IS ORGANISED BY THE ACADEMY OF SCIENCES MALAYSIA, LEVEL 20 MATRADE TOWER JALAN SULTAN HAJI AHMAD SHAH OFF JALAN TUANKU ABDUL HALIM 50480 KUALA LUMPUR. PLEASE NOTE THAT THIS PROGRAMME IS A SCIENCE COMPETITION AND NOT AN AWARD. PLEASE ALSO NOTE THAT THESE OFFICIAL RULES DO NOT CONSTITUTE A TENDER AND TENDER LAW REGULATIONS AND PRINCIPLES DO NOT APPLY.

VIRTUAL NATIONAL SCIENCE CHALLENGE IS A COMPETITION OPENS TO MALAYSIAN CITIZENSHIP SECONDARY SCHOOL STUDENTS (FORM 1 TO FORM 4) FROM MALAYSIAN SCHOOLS. SEE BELOW FOR THE COMPLETE ELIGIBILITY DETAILS. VIRTUAL NATIONAL SCIENCE CHALLENGE IS A KNOWLEDGE & SKILL CONTEST WHERE ELIGIBLE STUDENTS WILL BE INVITED TO TAKE AN ONLINE QUIZ AT THE NATIONAL SCIENCE CHALLENGE WEBSITE (www.nsc.my) TO COMPETE FOR PRIZES. THE COMPETITION COMPRISES AN ONLINE QUIZ PRELIMINARY LEVEL, VIDEO COMPETITION (SECOND ROUND) AND GRAND FINAL THAT WILL BE HELD VIRTUALLY. VOID WHERE PROHIBITED OR RESTRICTED BY LAW.

Competition Dates & Times:

Virtual National Science Challenge described in these Official Rules (the “Competition”) begins on or about 25 August 2020 and ends on or about 9 November 2020.

PROCESS	STARTS	ENDS
Open call for entries	8 July 2020	14 August 2020
Preliminary level <i>(competition to be conducted individually at own residence)</i>	25 August 2020	27 August 2020
Selection of State Winner and Teams for the Second Round	28 August – 1 September 2020	
Second Round: Video Competition <i>(competition to be conducted individually at own residence)</i>	1 – 20 September 2020	
Second Round: Video Review & Interview Session <i>(competition to be conducted individually at own residence)</i>	21 September – 9 October 2020	
Selection and Announcement of 5 Teams for the Grand Final	12 – 16 October 2020	
Coaching & Preparation for Grand Final	19 October – 6 November 2020	
Grand Final <i>(Subject to the current instructions by the National Security Council and the Ministry of Education Malaysia)</i>	9 November 2020	

Eligibility:

Competition is open to all Malaysian citizenship students (Form 1 to Form 4) from Malaysian Schools.

TERMS – REGISTRATION (8 JULY – 14 AUGUST 2020)

1. Teams interested to participate in the competition must register online through NSC website at www.nsc.my.
2. Only students from Form 1 to Form 4 are qualified to participate in the competition.
3. Each team must comprise three students from the same schools.
4. Team members may come from the same or different level (Forms).
5. Each team must have a Mentor teacher.
6. The registration fee is RM50 per team.
7. The closing date for registration is on **14 August 2020**.
8. Any registration received after the closing date will not be entertained.
9. Each successful registration will be followed by a confirmation email from the organiser.
10. Please make sure the registered email account is active and has sufficient storage space.
11. We encourage teams to be represented by different ethnicities to promote national unity.
12. Team members should have extensive knowledge of science, mathematics, and general knowledge.
13. Good command of English will be an advantage.
14. Each student who participated in this level will receive a certificate of participation.
15. Every entry is subject to the terms and conditions of the competition set by the organiser.

TERMS - PRELIMINARY LEVEL (25 – 27 AUGUST 2020)

1. Online quizzes can be taken in either English or Bahasa Malaysia.
2. Once a language is selected, students must submit all answer using the selected language. Any answer in a different language is considered incorrect. E.g. If Bahasa Malaysia is selected, all answers must be answered in Bahasa Malaysia.
3. Student who selected the language of choice shall complete and answer the quiz using the selected language. Student will be disqualified if they use a different language to answer the question.
4. Format: Online quiz (comprises 60 questions: 50 multiple choice questions and 10 fill in the blank questions).
5. Quiz duration: 60 minutes.
6. The online quiz will be conducted in stages at five different regions.

7. Schedule of the online quiz will be available at www.nsc.my one week prior to Preliminary Level.
8. Instruction to access the online quiz will be made available at www.nsc.my one week prior to Preliminary Level.
9. Top 3 teams from each state will be selected for the next stage of the competition.
10. Top 3 teams from each state and federal territories will be given an additional certificate for winning the preliminary level.
11. Results announced by the organiser are final.

TERMS – SECOND ROUND - VIDEO COMPETITION (1 – 20 SEPTEMBER 2020)

The second round consists of two sections, video competition and interview session.

1. Video competition

Theme: "Towards a Pandemic-resilient Community Through Science"

Subtopics: Medical Science, Engineering, General Science, Information Technology (IT), Robotics, or Artificial Technology (AI)

- i. Create an original video clip in English or Bahasa Malaysia (a maximum of 3 minutes running not including 10 seconds of the title screen) relevant to one of the subtopics, following the guidelines in the Competition rules.
- ii. All entries should begin with a 10-second full-screen "title screen" that includes the following information:
 - Group name
 - School name
 - School city, state
 - Title of video
- iii. Submissions **exceeding 3 minutes and 10 seconds will be disqualified.**
- iv. Videos must be uploaded as one single file in the highest quality as follows;
 - Video must be submitted in editable digital format
 - Minimum 1280 x 720 (HD) size
 - Format: mv/mov/avi/m4/mp4
- v. Prepare a short descriptive text of maximum 1000 characters in English/Bahasa Malaysia to be uploaded along with the video.
- vi. Sound effects and music are allowed, as long as the participants obtain the right to use and disseminate it.
- vii. Contestants must have full copyrights to the submitted material, including sound effects and music if used. Competition submissions must not include

any endorsements of products or services, or any obscene, violent, racist or defamatory content. Incomplete entries or entries that do not comply with the formal specifications will be automatically disqualified.

- viii. Submissions will also be rejected if the video spot in the entry features an identifiable individual who has not given their consent to appear or if the image features advertising or trademarks, which would otherwise require permission to use.
- ix. Written consent on the materials included in the submitted video, merely by the examples, images, illustrations, sound recordings, text, trademarks, trade names, products, logos, technical drawings or graphical charts or tables must be declared in the consent form.
- x. No professional assistance is allowed. Adults may assist with production but are limited to verbal guidance only. Adults are allowed to be actors or cameramen but not content contributors.
- xi. Video entries may be submitted through email along with the consent form starting from **25 August to 20 September 2020, 11.59pm** via cloud storage platform (Dropbox, Google Drive, etc.) to nsc@akademisains.gov.my.
- xii. The judges' decision is final. Decisions will be made based on the **Judging Rubric** by three independent judges.
- xiii. Total marks for the Video Competition is 50%.
- xiv. Bonus marks will be given to the top 5 most liked YouTube video.

1.1 Video Competition Judging Criteria

The judges will look for a creative, engaging and inspiring submission. Your entry will be judged on:

- i. Scientific content (20%)
- ii. Quality of the video (15%)
- iii. Clarity of presentation (15%)

2. Interview Session Rules and Regulation

- i. The interview session will take place from **21 September to 9 October 2020** via Zoom or other web conferencing platforms. Contestants will be contacted **3 days prior** to their scheduled date and time.
- ii. The interview session will take approximately 15 minutes. There will be three independent judges for each team of contestants.

- iii. The interview session shall begin with an introduction by the team members for no more than 3 minutes. Include a brief introduction of your team and an outline of the project.
- iv. The team will be assessed based on **Judging Rubric**. The judges' decision is final.
- v. Total marks for the interview session is 50%.

2.1 Interview Session Judging Criteria

Your interview will be judged on:

- Introduction (5%): Team members provide a clear and concise introduction of the members and project.
- Content (15%): The content is clear and relevant to the topic of the interview.
- Response (20%): The members are able to respond to the questions satisfactorily with confidence, accuracy and appropriate language use.
- Professionalism & Teamwork (10%): Team members take turn to speak, maintain good eye contact, and speak with an audible tone. Each team member understands all aspects of the topic irrespective of the role or contribution mentioned in the introduction.

TERMS - GRAND FINAL LEVEL (9 NOVEMBER 2020)

Five (5) winning teams (one team from each region) from the second round will proceed to the Grand Final. All team will be tested in four activities as follow:

1. Case Study
2. Prototype/Idea Pitching Competition
3. Quiz
4. Infographic Poster Competition

1. CASE STUDY

- I. A case study will be released to all groups on **19 October 2020**, three weeks (21 days) before the Grand Final.
- II. The case study answer should be emailed latest by 11.59pm, **6 November 2020** to nsc@akademisains.gov.my for the judging process.
- III. The case study answer should be prepared using **font 12, Times New Roman with 1.5 line spacing**.
- IV. The cover page of the case study answer should include case study title, team name, team members' names, school name, and region representing by the group.
- V. Page numbers should be placed on the right bottom of every page, excluding the front page.

VI. All case study answers should be submitted along with a turn-it-in report. The similarity index for the turn-it-in report should be less than 21% or else the case study will be considered as disqualified and automatically will not be proceeded for the judging process. As a consequence, the team will get a zero mark for the case study part.

Judging Criteria for Case Study

1. The judging process for the case study will be based on the following criteria:
 - Scope (60%)
 - Originality (20%)
 - Presentation (10%)
 - Integration (10%)
2. Full details on the judging criteria will be available during the released of the case study.
3. The judges' decision is final. Decisions will be made based on the judging rubrics for the case study that will be provided together with the case study for participants' reference.

2. PROTOTYPE/IDEA PITCHING COMPETITION

- I. As being taught in the virtual skills boot camp, all teams have to create a prototype to solve the case study provided on **19 October 2020**.
- II. The prototype should be presented during the Grand Final.
- III. Each team will be given 10 minutes for presentation and another 15 minutes for question and answer (Q&A) session.

Judging Criteria for Prototype/ Idea Pitching Competition

1. The judging criteria for prototype/ idea pitching competition will be based on the following criteria:
 - Technical difficulty (30%)
 - Critical thinking reflected in the prototype (20%)
 - Creativity reflected in the prototype (20%)
 - Presentation of the prototype (10%)
 - Group participation and cooperation (10%)
 - Ability to answer questions during the question and answer (Q&A) session (10%)

2. Details of judging criteria will be available during the released of the case study.
3. The judges' decision is final. Decisions will be made based on the judging rubrics for prototype presentation that will be provided together with the instruction for the prototype competition.

3. QUIZ

- I. Knowledge of the participated teams towards a disease that is discussed in the case study will be tested through a virtual quiz on the day of the Grand Final.
- II. There will be a set of 20 questions that need to be answered within 20 minutes.
- III. The judges' decision is final. Only correct answers will be counted.

4. INFOGRAFIC POSTER COMPETITION

- I. All teams for the Grand Final have to prepare an infographic poster based on the video they created for the second stage.
- II. The infographic poster should be prepared using an A3 paper size setting.
- III. The digital copy of infographic poster should be submitted late by **11.59 pm, 6 November 2020** through email to nsc@akademisains.gov.my for judging process.

Judging Criteria for Infographic Poster Competition

1. The judging criteria for infographic poster competition will be based on the following criteria:
 - Message clarity (30%)
 - Details (15%)
 - Content accuracy (10%)
 - Graphics (15%)
 - Design/layout (10%)
 - Mechanics and grammar (10%)
 - Conclusion and take-home message (5%)
 - Image and info credits (5%)
2. Full details on the judging criteria will be available during the released of the case study.
3. The judges' decision is final. Decisions will be made based on the judging rubrics that will be provided together with the instruction for the infographic poster competition.

5. VIRTUAL BOOT CAMP

A series of webinars will be held for the groups that successfully enter the Grand Final. These webinars serve as "virtual skills boot camp" for the participants to equip themselves

with the necessary skills to perform the final tasks given. Teachers/mentors are also highly encouraged to join the webinars.

The webinars are as follow:

I. Webinar #1: COVID-19 – Debunking Myths, Strengthening Facts

In the light of recent pandemic, many misleading and false information have emerged, causing a stir in the community at large. This webinar serves as a platform for the participants to ask questions, clarify doubts and gather real facts on COVID-19 pandemic that will help the participants come up with solutions for a particular problem and develop an idea/prototype.

II. Webinar #2: Computational Design 101

This webinar will introduce the participants to open-source computational design software which can be used to help participants create a blueprint and 3D model to visualise the idea/prototype.

III. Webinar #3: Pitching Like a Pro

This webinar will be coordinated by internationally renowned science communicators. They will be coaching the participants on how to effectively deliver their ideas/prototype in a creative and compelling way.

TERMS (COPYRIGHTS, CONFIDENTIALITY, AND PROTECTION OF PERSONAL DATA)

The copyright of the materials submitted for this competition remains to the participants, but the organiser (ASM and its partners) has the right to use for documentary, educational and promotional purposes including, but not limited to video streaming on ASM website, newspaper and broadcasting.

The organisers and judges reserve the right to remove any entries from the competition that they feel may breach any of the Competition Rules, the Terms and Conditions or may bring the competition into disrepute. Such entries will be disqualified.